

inlet port for allowing liquid to enter into said valve body, at least one other of said ports functioning as an outlet port for allowing said liquid to exit said valve body, and at least two other of said ports capable of functioning as either inlet or outlet ports with respect to said liquid after said liquid has entered said valve body;

a plurality of chambers in said valve body, each one of said ports opening into an associated one of said chambers;

145 art
a tortuous network of channels in said valve body, each one of said channels extending between two of said chambers to provide communication therebetween; and

a plurality of diverter valves, each one of said valves interposed in the path of an associated one of said channels;

wherein liquid entering up to two of said ports encounters one of said chambers and sections of three of said channels which lead to three of said diverter valves thereby permitting the valve assembly to be fully drained.

Ala Subj 8.(AMENDED) The diverter valve assembly of claim 7, wherein said angles are approximately 30°.

Subj 11.(AMENDED) A diverter valve assembly for use in a liquid chromatography system, comprising:

a unitarily formed valve body having a plurality of chambers and a tortuous network of passageways extending therethrough;

at least one inlet port connected to one of said plurality of chambers for receiving

the flow of a liquid into said valves assembly;

at least one outlet port connected to one other of said plurality of chambers for allowing said liquid to exit said valve assembly;

at least two additional ports connected to two other of said plurality of chambers for allowing the flow of liquid already in said valve assembly to exit and reenter said valve assembly without exiting into said chromatography system; and

a plurality of diverter valves interposed between said plurality of chambers and ports, wherein fluid entering up to two of said ports encounters one of said chambers and sections of three of said channels which lead to three of said diverter valves thereby permitting a complete flushing of said valve assembly.

Sub 11 14.(AMENDED) The diverter valve assembly of claim 13, wherein fluid flowing in a first direction enters said valve assembly through said first port, passes through said first chamber, is directed across said first diverter valve into said second chamber, exits said valve assembly through said second port, reenters said valve assembly through said fourth port, passes through said fourth chamber, is directed across said third diverter valve, passes through said third chamber, and exits said valve assembly through said third port.

Sub 12 16.(AMENDED) The diverter valve assembly of claim 13, wherein fluid flowing in a second direction enters said valve assembly through said first port, passes through said first chamber, is directed across said fourth diverter valve into said fourth chamber, exits said valve assembly through said fourth port, reenters said valve assembly through said second port, passes

RP

through said second chamber, is directed across said second diverter valve, passes through said third chamber, and exits said valve assembly through said third port.

R10

Sub 1 19.(AMENDED) The diverter valve assembly of claim 18, wherein said first diverter valve operates to prevent fluid communication between said first and said second chamber, said second diverter valve operates to prevent fluid communication between said third and said second chamber, said fourth diverter valve operates to prevent fluid communication between said third and said fourth chamber, and said fourth diverter valve operates to prevent fluid communication between said first and said fourth chamber.